

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): A method for the verification of anti-jamming in a communications system ~~comprising~~ having several sensors or adaptive antennas, comprising at least the following steps :

[[*]] estimating [[the]] a mean power π_y^{\wedge} of the output of the communications system,

[[*]] estimating [[the]] a respective power values P_u or $P'u$, of a station u , the antenna noise P_a or $P'a$, the thermal noise P_T , or $P'T$,

[[*]] estimating at least one of the following ratios :

$$J_{tot}/S_{tot} = \left(\sum_{p=1}^P ; ; P_p \right) / \left(\sum_{u=1}^U ; ; P_u \right)$$

[[(22)]]

with p = the jamming unit

= sum of the power values of the residual jamming units/sum of the power values of the stations on the reception band $B[.]$

$$J_{tot}/S_u = \left(\sum_{p=1}^P ; ; P_p \right) / P_u$$

[[(23)]]

= sum of the power values of the residual jamming units/power of the station u in the reception band B .

$$J_u / S_u = \left(\sum_{p=1}^P P_{pu} \right) / P_u$$

[[(24)]]

[[W]] with P_{pu} = power of the jamming unit p in the reception band B_u .

- comparing at least one of the three ratios with a threshold value.

2. (currently amended): [[A]] The method for the verification of anti-jamming according to claim 1, comprising ~~at least one~~ a step for estimating the mean power π_y^{\wedge} , for an output from a number K of samples, $y(k)$, $1 \leq k \leq K$ ~~of this output~~ of this output, given by

$$\pi_y^{\wedge} = \frac{1}{K} \sum_{k=1}^K |y(k)|^2$$

[[(25)]]

3. (currently amended): [[A]] The method for the verification of anti-jamming according to claim 1, comprising a step of estimation P_u^{\wedge} , P_u^{\wedge} of the power P_u , P_u' in using, firstly, ~~a~~ priori ~~a priori~~ knowledge of the parameters w and G_{num} for a digital application of the adaptive filters and $|\alpha|^2$, w and G for an analog application of the filters and secondly the estimation of the parameters π_u and S_u .

4. (currently amended): [[A]] The method for the verification of anti-jamming according to claim 1, comprising an estimation P_u^{\wedge} , P_u^{\wedge} of the power P_u , P_u' in using, firstly, ~~a~~ priori ~~a priori~~ knowledge of the parameters w and G_{num} for a digital application of the adaptive filters and $|\alpha|^2$, w and G for an analog application of the filters and secondly the estimation of the parameter η_a .

5. (currently amended): [[A]] The method for the verification of anti-jamming according to claim 1, comprising a step of estimation \hat{P}_u, \hat{P}'_u of the power P_u, P'_u in using ~~a-priori~~ a priori knowledge of the parameters w and G_{num} for a digital application of the adaptive filters and $|\alpha|^2, w$ and G for an analog application of the filters and secondly the estimation of the parameter η_T .

6. (currently amended): [[A]] The method for the verification of anti-jamming according to ~~one of the claim~~[[s]] 1, ~~2, 3, 4 and 5~~ comprising a step of estimation $\hat{J}_{tot} / \hat{S}_{tot}$, of the ratio J_{tot}/S_{tot} given by

$$\hat{J}_{tot} / \hat{S}_{tot} = (\hat{\pi}_y - \sum_{u=1}^U \hat{P}_u - \hat{P}_a - \hat{P}_T) / (\sum_{u=1}^U \hat{P}_u) \quad (26)$$

7. (currently amended): [[A]] The method for the verification of anti-jamming according to ~~one of the claim~~[[s]] 1, ~~2, 3, 4 and 5~~ comprising a step of estimation $\hat{J}_{tot} / \hat{S}_u$, of the ratio J_{tot}/S_u , given by

$$\hat{J}_{tot} / \hat{S}_u = (\hat{\pi}_y - \sum_{u=1}^U \hat{P}_u - \hat{P}_a - \hat{P}_T) / \hat{P}_u \quad (27)$$

8. (currently amended): [[A]] The method of verification of anti-jamming according to [[the]] claim[[s]] 1, ~~2, 3, 4 and 5~~ comprising a step of estimation \hat{J} / \hat{S}_u , of the ratio J / S_u in using the total power of residual jamming units in the B_u band of the working station u given by

$$\hat{J}_u / \hat{S}_u = (\hat{\pi}_{yu} - \hat{P}_u - \sum_{v \neq u} (\hat{P}_{vu} - \hat{P}_{au} - \hat{P}_{Tu})) / \hat{P}_u$$

(28)

9. (currently amended): A method of verification of anti-jamming according to ~~one of~~ the claim[[s]] 1 ~~to 8~~ comprising a step of determination of the precision of estimation, and wherein this value is used to set the threshold.

10. (currently amended): A system for the verification of anti-jamming in a communications system comprising several sensors or adaptive antennas, a ground station and a piloting device, comprising at least the following elements: for a verification by channel, from the ground and for a reception band B, a computer integrated into the piloting device and an onboard computer, the two computers being programmed to execute the following steps :

~~Communications Channel Power Measurement~~: Onboard function ~~parametrized~~ parameterized from the ground by the ~~Onboard Param VAA~~ Onboard Param Vaa function,

~~VAA Gain~~: Ground function,

~~Communications channel power measurement~~: onboard function, VAA Processing ~~VAA Processing~~: Ground function.

11. (currently amended): A system for the verification of anti-jamming in a communications system comprising several sensors or adaptive antennas, a ground station and a piloting device, comprising at least the following elements :

for a verification by station, an onboard computer and a ground computer, the computers being programmed to execute the following functions :

~~Communications Channel Power Measurement~~: onboard function ~~parametrized~~ parameterized from the ground by the ~~Onboard Param VAA~~ Onboard Param Vaa function,

~~VAA Gain~~: ground function,

~~Acquisition of Communications Channel~~: onboard function ~~parametrized~~ parameterized from the ground by the ~~Onboard Param VAA~~ Onboard Param Vaa function, ~~VAA Processing~~: ground function.

12. (currently amended): A use of the method according to claim 1 ~~or of the system according to one of the claims 10 and 11 to a space communications system.~~

13. (new): A use of the system according to claim 10 ~~[[to]]~~ for a space communications system.

14. (new): A use of the system according to claim 11 ~~[[to]]~~ for a space communications system.